PATENT APPLICATION
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FITNESS MACHINE WITH DATA EXCHANGE PORT

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TITLE

FITNESS MACHINE WITH DATA EXCHANGE PORT

FIELD OF THE INVENTION

[0001] The present invention relates to the exchange of information obtained while exercising. More specifically, the present invention relates to the provision of a data exchange port on an exercise apparatus for the purpose of exchanging statistical and other information acquired during an exercise session.

BACKGROUND OF THE INVENTION

[0002] Exercise is a popular pastime, especially in light of the current health-conscious mentality of society and the increasing number of sedentary occupations. One common feature of the modern exercise phenomenon is the desire to improve one's physical condition over time and to track that improvement. In order to do this, a person must keep records of exercise sessions or workouts and their statistics for comparison and evaluation. However, typically, records are not easily kept during an intense workout because an individual has his or her attention focused on the various exercises and because the traditional method for keeping records has been to record information manually. This method required not only maintenance at the gym, but also the archival of a number of records. To this end, many exercise machines have built-in counters to keep track of repetitions, or reps, performed and give the user a final count after the exercise is completed. This solution still requires recording the final rep count. Other solutions have added memory to the counters, which works well with a single user machine but falls short in a multiple user setting. Exercise machines have been enhanced with computers and even networked with internet access, such as those advertised by Fitlinxx®. Linking exercise equipment to computers for the purpose of centralizing data collection is known in the prior art, such as shown in FITLINXX® advertisement literature by Integrated Fitness Corp. and United States Patents 5,655,997 and 5,213,555. This latest solution proves workable, as networked systems currently allow users to log-in and track performance machine to machine. However, the problem still exists when a user desires to workout at a non-networked location and there is the added problem of incorporating statistics from a non-networked location into the user's usual networked location.

[0003] To address the problem of transferability and record keeping, the present invention provides a computer-enhanced exercise machine with a data exchange port. The present invention eliminates the need for the user to manually record workout statistics and eases the transportation of that information from location to location. After a workout, or even part of a workout on one computer-enhanced machine, the user simply downloads the accumulated statistics by connecting a PDA, laptop or similar portable device to the exercise machine's data exchange port and stores the information on the portable device. To add those statistics to a file at another location, the user simply uploads the information in the same fashion.

SUMMARY OF THE INVENTION

[0004] The present invention utilizes a data exchange port so that a user may take his or her workout data to any gym, club or other location at will and not be limited to the current linked systems. The present invention also frees a user from the responsibility of manually recording workout data, reduces the possibility of loss of data, and makes the data entirely portable, which is to say the user can take the data anywhere or even privately maintain his/her own information without the intrusion of an invasive system.

[0005] The present invention includes at least one or more data exchange ports to a linked exercise apparatus. The ports may be serial or parallel and may be configured for any type of device (laptop, PDA, digital organizer, etc.) capable of receiving and storing data. The actual structure and configuration are limited only by the requirement that the systems be, in some way, compatible. This compatibility requires communications software, compatible database software and a physical interface structure.

DESCRIPTION OF THE DRAWINGS

[0006] Figure 1 is a schematic drawing of a prior art computerized exercise apparatus;

[0007] Figure 2 is a schematic drawing of the apparatus of FIG. 1 equipped with a data exchange port according to the present invention; and

[0008] Figure 3 is a network schematic showing exercise and auxiliary stations.

DETAILED DESCRIPTION OF THE INVENTION

[0009] With reference to the aforementioned drawings, the present invention is illustrated. Referring to drawing Figure 1, depicted is a prior art exercise apparatus. As can be seen, an exercise machine 2 is equipped with a sensor apparatus 5. The exercise machine 2 may be of any design and the sensor apparatus 5 may be of any sort suited to exercise machine 2. The sensor apparatus 5 is in operable connection to computer 1 via an interface 12. The exercise machine's interface 12 is operatively coupled to the computer's CPU 10, which is in turn in operable relation to the computer's memory 11. Statistics derived from the workout session are stored in memory 11 and may be displayed on a display module (not shown) for the convenience of the user. At this point, computerized exercise apparatuses vary in construction and purpose. The most complex are networked, through standard networking protocols and equipment (as shown in Figure 1), to a server 3 through a network interface 13 and are used to monitor and evaluate the user's performance based on workout regimens that are preprogrammed and predetermined by a trainer.

[0010] According to the present invention, illustrated in drawing Figure 2, the apparatus illustrated in drawing Figure 1 includes at least one or more data exchange ports 14, operatively coupled to CPU 10, for connection to download device 4. Download device 4 should be equipped with its own CPU, memory, input devices and input port (not shown). In order to facilitate the exchange of data, both computer 1 and download device 4 should be previously equipped with compatible data management software and exchange protocols and software. Data exchange port 14 need only be compatible with both computer 1 and download device 4 to provide an operable connection between the two. The individual styling and equipment would vary with the design of the device and would include connection cords, cradles, light waves, radio waves or any other method of connection. The user, upon activating a download cycle, is able to download and store any workout data, including regimens, into download device 4. The exchange software could be designed to allow uploading as well. This would give a user, normally in a networked system, the freedom to use the data at any exercise facility, on any related machine, and still follow a regimen prescribed at his or her usual facility by his or her trainer, record or, if the other location is properly equipped, download new data and upload it into the user's usual networked system for incorporation into future regimens and performance evaluations.

[0011] In a networked system, shown in drawing Figure 3, the inclusion of at least one or more data exchange ports 14 can be added to any computer connected to server 30, regardless if it has an exercise machine connected to it. An auxiliary computer station 36, or a plurality of auxiliary stations, can be provided in a network. These extra stations would prove useful in the event of heavy demand to use the exercise apparatuses 34 in a network by allowing users to exchange data at a location without interfering with another user's regimen.

[0012] Having thus described certain preferred embodiments of the present invention, it is to be understood that the invention defined by the appended claims is not to be limited by particular details set forth in the above description, as many apparent variations thereof are possible without departing from the spirit or scope thereof as hereinafter claimed.